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The use of biological diversity and it's components for the development of new technologies in various sectors in Russian Federation - the gaps of legal regulation

General principles of international legal regulation

The main objectives of the Convention on Biological Diversity adopted in Rio de Janeiro, June 5, 1992, are the conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of benefits arising from the use of genetic resources, including by providing appropriate access to genetic resources and by appropriate transfer of relevant technologies, taking into account all rights over those resources and to technologies, and by appropriate funding. The Russian Federation signed the Convention on Biological Diversity in 1992 and ratified it in 1995².

Biodiversity is defined by the Convention as "the variability among living organisms from all sources including, inter alia (Latin: "among others"), terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part: this includes diversity within species, species diversity and of ecosystems".

To implement the objectives of biodiversity conservation in national law a number of measures should be taken. They include the establishment of a system of protected areas or areas where special measures need to be taken to conserve biological diversity; regulation of the quantity and the rational use of biological resources important for the conservation of biological diversity in protected areas or outside them to ensure their conservation and sustainable use; the promotion of the ecosystems protection, natural habitats and the maintenance of viable populations of species in natural surroundings. For the purposes of the legal regulation of the biological diversity and its' components use for the creation of new technologies in various fields of science and industry the term "genetic resources" is used as it is defined in the Convention on Biological Diversity - the genetic material of actual or potential value. In turn, "genetic material" means any material of plant, animal, microbial or other origin containing functional units of heredity³.

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² Federal Law of 17 February 1995 г. № 16-FZ «On ratifying of the Convention on Biological Diversity» // СЗ РФ. 2005. № 8. Ст. 601. (Collection of Russian Federation Legislation)

³ См.: Солнцев А.М. Проблемы доступа к генетическим ресурсам и справедливого совместного получения возможных выгод их использования // Информационно-аналитический бюллетень "Мосты". 2008. 5 Март. С.16-17 (Solncev A.M. Problems of access to genetic resources and benefit sharing)



The state of genetic resources in the Russian Federation

According to data presented in the "National Report of the Russian Federation on Access to Genetic Resources and Benefit-Sharing," published by the Department of Environmental Protection and Security of the Ministry of Natural Resources and Environment of the Russian Federation, Russia occupies ninth of the land mass of the planet and most of the extra-tropical Eurasia. Despite its high landscape diversity of biological diversity is relatively low compared to more southern countries. On its territory are 8 natural landscape zones that are more than 11,000 species of vascular plants, 9000 - Algae, 3000 - lichens, 1370 - mosses and 320 - mammals, 730 - birds , 75 - reptiles, 30 amphibians, more than 400 species of fresh water , more than 150,000 invertebrate animals , including 100,000 insects , shellfishes 2000, 10,000 spiders , etc. Protected areas make up about 2 % of the country, they represented more than 75 % of the fauna and 50 % of flora.

The report also notes that the Russian special mechanisms for implementation of the requirements of Article 15 and 16 of the Convention has not yet been developed and are being made only in respect of the first steps in the international market and the use of genetic resources derived from income for the purpose of safeguarding national biodiversity. In the Russian Federation genetic resources in their use of various government and commercial organizations - institutes and research centres, RAS, conducting fundamental biological research, Russian Academy of Agricultural Sciences, conducting work on breeding, preservation of cultural diversity of plants and animals, regulation of "access and participation" in the agricultural sector, the Russian Academy of Medical Sciences, the medical aspects of the problem. In Russia there are 128 universities and educational institutions, industry institutes of various ministries related to the issue of genetic resources.

According to the drafters of the "National Report of the Russian Federation on access to genetic resources and benefit-sharing" special attention should be paid to the formation of the last decade in the country, "small business", based on the use of genetic resources in areas such as the use of natural medicinal plants, industrial microbiology, plant breeding work with the "wild " of the genetic material, breeding for commercial purposes animals and plants in nurseries , botanical gardens and zoos , and others stakeholders representing the interests of the state in terms of access and participation in the benefits of the utilization of genetic resources are the protected areas the federal level - 100 nature reserves , 35 national parks, game reserves and natural monuments. The special regime of nature set in areas densely populated by indigenous peoples of the North and the Far East (around 40 nationalities and ethnic groups) with a total of more than 200,000 people), whose communities are the interested party in solving the problems of access to genetic resources in their territory. In Russia, 28.3 million hectares of land is owned communally ancestral farms and 17.1 million hectares are reindeer pastures and forests.

Genetic resources are widely used in various high-tech industries related biotechnological methods. For example, the annual turnover of the global market of products related to genetic resources, estimated at 500-800 billion U.S. dollars: for example, about 80 % of med-



icines for cancer are based on natural products with the addition of a variety of genetic resources⁴.

Legal regulation on genetic resources

In the Russian Federation in the sphere of legal regulation of genetic resources and intellectual property rights such regulations apply, as Part IV of the Civil Code of the Russian Federation dated 18 December 2006 N 230-FZ Federal Law of July 5⁵, 1996 N 86-FZ "On state regulation in the field of genetic engineering"⁶, the Law of the Russian Federation on May 14, 1993 № 4979 –I "On Veterinary Medicine"⁷, the Federal Law of April 24, 1995 N 52- FZ "On Fauna"⁸, the Federal Law of 8 December 2003 № 164- FZ "On the Principles of State Regulation of Foreign Trade"⁹, Federal Law of July 27, 2006 № 149- FZ "On Information, Information technologies and Protection of information"¹⁰, the Federal Law of August 23, 1996 N 127- FZ " on Science and State Science and technology Policy"¹¹, - the Federal Law of 17 December 1997 N 149 -FZ "On Seed"¹² that regulate the storage, transfer, exchange, and formal protection of intellectual property rights and, in part, traditional knowledge. However, it should be noted that in the Russian legislation on intellectual property rights over genetic resources is not settled in full and they are not a separate object of protection.

At present, the Russian Federation there is no single piece of legislation, which would be devoted to the problems of legal regulation of the use of genetic resources for science and industrial production of various products associated with their use. Attempts are made to the adoption of regulations at the level of the CIS countries, devoted to particular industries. For example, the Russian Federation has signed and put into effect an agreement on cooperation in the conservation and utilization of plant genetic resources of states - participants of the CIS (Minsk, June 4, 1999)¹³, the goals and objectives of cooperation in the framework of which, among others, are: the implementation of mutually beneficial exchange of genetic resources of cultivated plants and their wild relatives, the implementation of joint research programs to develop methods for the study, the efficient use and conservation of genetic diversity of plants, participation in joint expeditions for mutual replenish the gene pool of the national collections of plants, the creation of joint collections of individual cultures and groups, conducting joint environmental research in order to obtain the raw material for the creation of promising varieties and hybrids of agricultural crops

⁴ See in detail: URL: <http://www.sevin.ru/rusgenres/documents/ddokladrf.html> (10.10.2013)

⁵ СЗ РФ. 2006. № 52 (ч.1) . Ст. 5496.

⁶ СЗ РФ. 1996. № 28. Ст. 3348.

⁷ ВСНД РФ и ВС РФ. 1993. № 24. Ст. 857.

⁸ СЗ РФ. 1995. № 17. Ст. 1462.

⁹ СЗ РФ. 2003. № 50. Ст. 4850.

¹⁰ СЗ РФ. 2006. № 31 (ч.1) . Ст. 3448.

¹¹ СЗ РФ. 1996. № 35. Ст. 4137.

¹² СЗ РФ. 1997. № 51. Ст. 5715.

¹³ Бюллетень международных договоров. 2000. № 11.



to ensure a mutually beneficial access to samples of the gene pool of plants, gathered together in the gene banks of the former republics of the USSR, to facilitate the establishment of national bank of plant genetic resources through the sharing of the gene pool, method of operation and technologies, the creation of joint computerized databases of the national gene pool for the accelerated use of plant genetic resources in breeding programs.

Given the fact that the development of biotechnology is one of the priority tasks of economic development of the Russian Federation , as well as inter-sectoral nature of the problem in April 2012, has been developed and approved by the Government of the Russian Federation "A comprehensive program for the development of biotechnology in the Russian Federation for the period up to 2020"¹⁴, the strategic goal which Russia is the exit to the leading position in the development of biotechnology, in particular in certain areas of biomedicine, Agri , industrial biotechnology and bioenergy , and the creation of a globally competitive sector of the bioeconomy, which along with nanotechnology and information technology should be the basis of modernization and construction of a post-industrial economy. The program will improve the legal, economic, informational and organizational framework for the development of biotechnology. In the area of environment will be created effective methods of eliminating impurities and prevent adverse human impact on the environment. To ensure the centralization, standardization and accessibility of genetic resources, biotechnology destination Programme envisages the creation of a special infrastructure, which includes major national and specialized centres of biological resources (or genetic resources), as well as research collections, which differ in their functions (including service) .

One of the objectives of the program is also the harmonization of Russian and international legal regulation of the turnover of genetic resources and biological collections. The main participants of the program according to its provisions are the Ministry of Education and Science of the Russian Federation, the Ministry of Industry and Trade of the Russian Federation, the Ministry of Agriculture of the Russian Federation, the Ministry of Natural Resources and Environment of the Russian Federation, the Ministry of Health of the Russian Federation, the Ministry of Energy of the Russian Federation, the Ministry of Regional Development of the Russian Federation, the Federal forestry Agency, the Federal Agency for Fisheries, Russian Academy of Sciences, Russian Academy of Medical Sciences, Russian Academy of Agricultural Sciences.

It is hoped that the work on the implementation of the program on the basis of inter-agency will identify all deficiencies of legal regulation in this area, and will lead to the improvement of the legal regulation of the use of components of biological diversity. Among other currently remain open questions of legal regulation of access to genetic resources and equitable sharing of benefits from their recoverable. Without which the objective of the program for the harmonization of Russian and international legal regulation of the turnover of genetic resources and biological collections is impossible.

¹⁴ Approved by the Government of the Russian Federation dated 24 April 2012 number 1853p-P8. The text of the program has not been formally published.